

**Before the
Federal Communications Commission
Washington, DC 20554**

In the Matter of)	
)	
2004 and 2006 Biennial Regulatory Reviews –)	WT Docket No. 10-88
Streamlining and Other Revisions of Parts 1)	
and 17 of the Commission’s Rules Governing)	
Construction, Marking and Lighting of)	
Antenna Structures)	
)	
Amendments to Modernize and Clarify Part 17)	RM-11349
of the Commission’s Rules Concerning)	
Construction, Marking and Lighting of)	
Antenna Structures)	

To: The Commission

COMMENTS OF CTIA–THE WIRELESS ASSOCIATION®

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SUMMARY

CTIA supports the FCC's efforts to modernize its Part 17 rules, to eliminate unnecessary rules, and to reduce inconsistencies within the FCC's rules. In revising Part 17, it is important that the FCC refrain from making any rule changes that could, even inadvertently, undermine our nation's air safety. Accordingly, CTIA respectfully submits that, based on both air safety and the public interest, the FCC should not:

- Apply retroactively the Federal Aviation Administration ("FAA") marking and lighting changes when the FAA determines that these changes should be made prospectively. The Commission should avoid rule changes that will result in inconsistencies between the FCC's rules and those of the FAA, the expert agency tasked with recommending prospective marking and lighting for individual antenna structures schemes prior to construction or alteration.
- Require that a new Antenna Structure Registration ("ASR") be filed each time the FAA issues an FAA Determination for reasons other than changing the height, location or lighting scheme of a tower. The Commission should avoid rule changes that would unduly broaden the scope of its rules to require the submission of ASRs for facility changes that do not physically obstruct air navigation. For example, in the event the FAA revises its rules to require FAA notification with respect to the addition or change of frequencies, increases in effective radiated power, changes in antenna configuration, or similar changes that do not impact the height or overall size of an existing structure, the FCC should not require the submission of a new or modified ASR upon issuance of the new FAA determination.
- Replace the FCC's current standard of due diligence with an inflexible deadline for effectuating lighting repairs. The Commission should refrain from revising its rules to provide specific timeframes within which tower structure owners must complete lighting system repairs. Lighting system failures can vary in magnitude and cause, and a host of factors can have a significant impact on the time necessary to complete a repair. Consequently, lighting system repairs do not lend themselves to uniform time deadlines. The FCC's rules currently reflect this fact and, as a result, properly require tower owners to complete lighting system repairs "as soon as practicable." Instead of adopting a hard and fast time limitation on lighting system repairs, the Commission should retain its existing rules, which provide the FCC the flexibility to consider the relevant factors of each situation.
- Require multiple ASR signs to be posted at a given facility. Instead, the Commission should adopt a clear standard that requires the ASR Number to be posted on the primary vehicle access point if the antenna structure is located within a fenced area, or at the base of the antenna structure if it is not surrounded by a fence. At a minimum, the Commission must clarify its proposed ASR posting rule by defining the critical terms contained in the rule. This process should be completed at the rulemaking stage as opposed to the Commission making *ad hoc* determinations in the context of disputes or enforcement proceedings.

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TO: THE COMMISSION

COMMENTS OF CTIA–THE WIRELESS ASSOCIATION®

CTIA – The Wireless Association® (“CTIA”)¹ submits the following comments in response to the Federal Communications Commission’s (“FCC” or “Commission”) *Notice of Proposed Rulemaking* issued in the above-captioned proceedings.² CTIA supports the Commission’s efforts to modernize its Part 17 rules, to eliminate unnecessary rules, and to reduce inconsistencies within the FCC’s rules, but believes that

¹ CTIA – The Wireless Association® is the international organization of the wireless communications industry for both wireless carriers and manufacturers. Membership in the organization covers Commercial Mobile Radio Service (“CMRS”) providers and manufacturers, including cellular, Advanced Wireless Service, broadband PCS, ESMR and 700 MHz licensees, as well as providers and manufacturers of wireless data services and products.

² *2004 and 2006 Biennial Regulatory Reviews – Streamlining and Other Revisions of Parts 1 and 17 of the Commission’s Rules Governing Construction, Marking and Lighting of Antenna Structures; Amendments to Modernize and Clarify Part 17 of the Commission’s Rules Concerning Construction, Marking and Lighting of Antenna Structures*, Notice of Proposed Rulemaking, 25 FCC Rcd 3982 (2010) (“NPRM”).

the FCC must be cognizant of the fact that changes to its Part 17 rules could adversely affect our country's air safety. CTIA respectfully submits that neither air safety nor the public interest would be served by: (a) the FCC's retroactive application of Federal Aviation Administration ("FAA") lighting changes when the FAA determines that these changes should be made prospectively; (b) requiring that a new Antenna Structure Registration ("ASR") be filed each time the FAA issues an FAA Determination for reasons other than changing the height, location or lighting scheme of a tower; (c) replacing the FCC's current standard of due diligence with an inflexible deadline for effectuating lighting repairs; or (d) requiring multiple ASR signs to be posted at a given facility.

It is important that, as part of the FCC's laudable effort to revise Part 17, it avoids rule changes that will create inconsistencies between the FCC's rules and those of the FAA that might inadvertently compromise air safety. The Commission also should avoid promulgating regulations, or the retroactive application of regulations, that would have the effect of overriding the FAA's expertise on air safety matters.

I. THE COMMISSION SHOULD NOT RETROACTIVELY APPLY NEW MARKING AND LIGHTING REQUIREMENTS TO EXISTING STRUCTURES.

The Commission proposes to modify its rules to make them consistent with the most recent FAA painting and lighting recommendations.³ Specifically, the Commission proposes to eliminate references in its rules to obsolete FAA Advisory Circulars. CTIA agrees that the Commission's rules should not refer to FAA Advisory Circulars that have been superseded. Further, CTIA supports the Commission's proposal to revise its rules

³ *NPRM*, 25 FCC Rcd at 3988 ¶ 11.

to require marking and lighting of a facility to be consistent with the marking and lighting recommended in the FAA Determination and associated study, and thereby eliminate inconsistencies between the FAA and FCC rules.

The Commission should not, however, automatically apply new painting and lighting recommendations arising out of new FAA Advisory Circulars to existing structures that already have completed the FAA Determination process and for which ASRs already have been filed with the Commission. Instead, the Commission should be guided on marking and lighting issues by the recommendations issued by the FAA. As the FCC has recognized previously,⁴ the FAA is the federal agency that has the expertise to recommend the appropriate marking and lighting of towers and non-tower structures so as to ensure the nation's air safety. Because the FAA only recommends lighting and marking specifications prior to construction or alteration of an antenna structure and does not thereafter require updates to lighting and marking,⁵ the FCC should not apply any new standards retroactively to existing structures.

In addition, the burden associated with any such retroactive application of new marking and lighting requirements on both FCC and tower owner resources would be substantial. There currently are over 112,000 antenna structures registered in the FCC's

⁴ See, e.g., *Streamlining the Commission's Antenna Structure Clearance Procedure and Revision of Part 17 of the Commission's Rules Concerning Construction, Marking and Lighting of Antenna Structures*, Memorandum Opinion and Order and Order on Reconsideration, 15 FCC Rcd 8676, 8678-79 ¶ 5 (2000) ("ASR Clarification Order").

⁵ See generally 14 C.F.R. § 77; Federal Aviation Administration, *Obstruction Marking and Lighting*, Advisory Circular AC 70/7460-1K (Feb. 1, 2007), available at https://oeaaa.faa.gov/oeaaa/external/content/AC70_7460_1K.pdf; see also *Streamlining the Commission's Antenna Structure Clearance Procedure and Revision of Part 17 of the Commission's Rules Concerning Construction, Marking and Lighting of Antenna Structures*, Report and Order, 11 FCC Rcd 4272, 4293 ¶ 49 (1995) ("At present, the FAA recommends painting and lighting for antenna structures prior to construction only, and thereafter does not recommend periodic updates.").

ASR database. Automatically applying new FAA marking and lighting guidelines retroactively to these existing structures could result in a tsunami of ASR filings reflecting changes to existing structures being submitted through the FCC's ASR system. Even assuming the ASR system could handle the resulting multitude of filings, processing the filings would require the commitment of substantial Commission staff resources.

Further, the economic burden on antenna structure owners could be devastating. There would be two distinct significant costs: (1) the manpower necessary to file numerous new ASRs; and (2) the actual cost of removing the existing lighting, purchasing new equipment and installing it. Tower owners estimate that the costs associated with the replacement of a lighting system range from \$7,000 to \$40,000, depending upon the lighting system that must be employed and the characteristics of the antenna structure. Both sets of costs would be multiplied not by five or ten, but by tens of thousands, as even one change to an FAA marking or lighting requirement could impact tens of thousands of structures.

Because applying any new standards retroactively to existing structures would create tension with the FAA's air safety implementation process and result in tremendous disruption, burden and costs to the FCC and industry, the FCC should decline such a retroactive application.

II. THE FCC SHOULD NOT UNDULY EXPAND THE SCOPE OF ASR FILING TRIGGERS.

The Commission proposes to revise its rules to eliminate the listing of circumstances in which notice to the FAA is required for a new or modified antenna

structure, which in turn triggers the requirement to register the structure with the FCC by filing an ASR. Instead, the FCC proposes to refer to the FAA rule regarding when such FAA notice is required, and then to require an ASR filing in each instance in which the FAA rule requires an FAA notice. Noting that the FAA is in the process of considering proposed changes to its rules, the FCC asks whether an ASR filing requirement should be triggered in each case in which an FAA notice is required.⁶ The FCC should not require that a new ASR be filed each time the FAA issues an FAA Determination for reasons other than changing the height, location or lighting scheme of a tower.

In the event the FAA revises its rules to require FAA notification for facility modifications that do not involve changes to a structure's overall physical attributes, those expanded FAA filing obligations should not trigger an ASR filing requirement. For example, the addition or change of frequencies, and increasing the effective radiated power ("ERP") will never change the height, location, or lighting and marking of an existing structure; they are, in fact, invisible to the naked eye.⁷ Thus, FCC registration and the need to file a new or modified ASR should not be triggered for any FAA Determinations that are based on changes that do not affect the tower's height, location or painting and marking. Accordingly, CTIA recommends that the proposed rule be revised to specify that the owner of an antenna structure, which is required to provide notice to the FAA because it would physically obstruct airspace, must register the structure with the FCC.⁸

⁶ *NPRM*, 25 FCC Rcd at 3990-91 ¶¶ 18-20.

⁷ In addition, changes to the antenna configuration that do not change the height of the tower should be treated similarly to changes in frequency and ERP.

⁸ In addition, CTIA recommends that the FCC give tower owners the flexibility to revise their current ASRs, via an administrative amendment, to provide the number of the new FAA

III. THE COMMISSION SHOULD NOT PRESCRIBE STANDARD SURVEY METHODS.

The *NPRM* requests comment on whether the Commission should revise Part 17 to mandate a specific survey method to ensure the accuracy of tower height and coordinate measurements.⁹ The Commission should not mandate specific survey methods or height calculation protocol for several reasons.

The Commission has not demonstrated that there is a problem involving tower heights and coordinates that requires a solution. While the Commission notes that the “measurements taken using older survey methods may differ significantly from those performed using current GPS technology,”¹⁰ it does not suggest that existing registered structures for which older survey methods were used have presented a danger to air safety.

Moreover, the FAA, the agency tasked with air safety, has not mandated a uniform survey method in connection with the FAA notification process. Instead, the FAA determines on a case-by-case basis what information it needs in order to complete its analysis of a particular facility. The FCC should continue to defer to the FAA to assess, in the first instance, whether a structure poses a threat to air safety, and what information the FAA needs in order to make that determination. As the FCC found in its *ASR Clarification Order*:

[T]he requirement that antenna structure owners first obtain an aeronautical study from the FAA insures reliability of the antenna structure site data and promotes air safety. . . . Because the FAA in the first instance determines whether an antenna structure poses a hazard to air

Determination if required for reasons other than changes to the tower’s height, location or painting and marking. Permitting these changes to be done via an administrative amendment would obviate the need for tower owners to prepare and file, and the FCC to process, unnecessary notifications of construction.

⁹ *NPRM*, 25 FCC Rcd at 3990 ¶ 17.

¹⁰ *Id.*

navigation and recommends appropriate painting and lighting, we conclude that it is appropriate that the FAA – and not the FCC – specify the accuracy of site information that is necessary for the FAA to make its determination.¹¹

There is no indication in the *NPRM* that circumstances have changed such that this general principal should not continue to guide the Commission. Indeed, no one particular survey methodology would be appropriate for all tower sites. For example, in some areas (*e.g.*, heavily wooded areas where satellite signals are obscured) a solely GPS-based methodology cannot be relied upon. A variety of surveying techniques may be used at a single tower site, allowing the surveyor to overcome constraints that may be associated with a single surveying methodology, and thus provide more accurate results. If the FCC were to limit the surveyor to one survey technology, the surveyor would be unable to select the best methodology for a given site and would be unable to incorporate new surveying technologies.

Further, the very nature of technology is that it often outstrips our predictive powers. When the surveyor's bob and plumb were first used it was difficult to imagine that GPS systems would be designed to use satellites in geostationary orbit as their backbone infrastructure. Since standards continue to evolve, there is no certainty that the standard the FCC might choose would remain the most accurate standard over time.

If the Commission nonetheless decides to adopt a standard survey method, it must first develop a full record with the input of both industry and the FAA. As noted above, different survey methods have advantages depending on various factors such as topology and the geographic location of the site. The FCC must carefully consider the various survey methods before determining whether any particular method is suitable in all

¹¹ *ASR Clarification Order*, 15 FCC Rcd at 8678-79 ¶ 5 (citations omitted).

situations and, if not, whether there are several that the Commission would prefer. Further, it would be essential for the FCC to fully vet any proposed standards with the FAA to ensure that air safety is not inadvertently compromised by the FCC's adoption of a single standard.

IV. THE COMMISSION SHOULD NOT ADOPT SPECIFIC TIMEFRAMES FOR LIGHTING SYSTEM REPAIRS.

In the *NPRM*, the Commission expresses concern that its rules requiring tower owners to fix lighting outages “as soon as possible” may be overly vague and give rise to confusion regarding whether the owner must notify the FAA so that it can issue a Notice to Airmen regarding the outage.¹² The Commission asks whether it should delete those general rule provisions, and instead specify a time limitation for owners to complete lighting system repairs. The FCC further asks whether such a deadline should vary by location and/or weather concerns.

CTIA respectfully suggests that the Commission should not adopt a specific deadline for tower owners to complete lighting system repairs. The repair of tower lighting systems does not lend itself to a specific timeframe. Numerous variables can impact the length of time necessary for a repair, including:

- (1) the severity of the lighting outage;
- (2) the extent of repair required (*e.g.*, is it a repair to a 200-foot tower or a 1500-foot tower?);
- (3) the availability of the necessary equipment;
- (4) the availability of a tower installation crew;¹³

¹² *NPRM*, 25 FCC Rcd at 3994 ¶ 27.

¹³ The Commission should be mindful that an inflexible deadline for completing repairs may endanger tower crews if they are forced to scale a tower or perform other lighting system repair

- (5) weather conditions;
- (6) the geographic location of the tower (*e.g.*, towers in very remote locations with limited or no access roads cannot be accessed as quickly as towers in or near towns or adjacent to roads);
- (7) the immediate impact of a natural or manmade disaster;
- (8) other factors that can make it difficult, if not impossible, to access a site to complete repairs (*e.g.*, after an extreme situation such as Hurricane Katrina, a site may still be surrounded by unnatural water levels, making deployment of a generator or restoration of electricity impossible until the water recedes to a safe level);
- (9) restrictions on access to the leased property (*e.g.*, sites located in forests may not be accessed, pursuant to a lease agreement, during the mating and hibernation seasons of various species); and
- (10) delays associated with the existence of endangered birds' nests at the site, including the requirement to secure a permit from the U.S. Fish and Wildlife Service to move an active migratory bird nest, which can take several months.¹⁴

The breadth of this admittedly partial list of factors strongly argues for retaining the FCC's current policy that accounts for the circumstances surrounding the outage to determine the appropriate timeframe for completing repairs.

Rather than establish a draconian deadline, which a tower owner will then have the burden of demonstrating is unreasonable or impossible to meet in a particular circumstance, the FCC should retain its current standard, which requires repairs to be completed "as soon as practicable."¹⁵ The current standard offers two advantages over a

functions under non-optimal conditions, such as inclement weather, night-time climbing, or climbing after lengthy trips to remote tower locations.

¹⁴ The U.S. Fish and Wildlife Service, *Migratory Bird Permits-Authorized Activities Involving Migratory Birds*, at 2 (Jan 2002), available at <http://www.fws.gov/birds/Permits-Fact-Sheet.pdf> (posits: "How long will it take to process my permit?" and answers: "You should allow at least 60 days for processing a complete application.").

¹⁵ 47 C.F.R. § 17.56(a). The general standard for repair and restoration of lights and associated equipment is found in Section 17.56(a) of the FCC's Rules, which requires that they be completed "as soon as practicable." CTIA notes, however, that Section 17.48(b) of the Commission's Rules uses a slightly different "as soon as possible" standard for repairs to

specific uniform time deadline. First, in certain instances, the requirement to repair a lighting failure “as soon as practicable” may actually result in lighting system repairs being completed more quickly than if the tower owner were allowed a longer generic window in which to complete repairs. In addition, the current standard allows for consideration of the factors identified above that have a direct impact on the time needed to complete a repair. The Commission should not forego this discretion to consider these factors in favor of a bright-line rule, particularly since that bright-line rule is unlikely to result in the type of certainty the Commission seeks. As a multitude of factors impact the time necessary to complete a particular lighting repair, tower owners would frequently be forced to seek waivers from the FCC if they will be unable to complete the necessary repairs within the generic window. This would result in FCC staff resources being consumed considering waiver requests that heretofore have not been required.

V. THE COMMISSION SHOULD NOT REQUIRE ASRs TO BE POSTED AT MULTIPLE PLACES AT A TOWER SITE.

Section 17.4(g) of the Commission’s Rules presently requires that an ASR be posted in a place that is “conspicuous,” “so that it is readily visible near the base of the antenna structure.”¹⁶ In the *NPRM*,¹⁷ and in proposed Section 17.4(j) of the Rules, the FCC proposes to revise the posting requirements such that the ASR must be posted at a location that it is “visible and legible from the publicly accessible area nearest the base of the antenna structure along the publicly accessible roadway or path.”¹⁸ In the *NPRM*, it

sidelights. 47 C.F.R. § 17.48(b). CTIA recommends that the FCC standardize the two rules and revise Section 17.48(b) to require that repairs to sidelights be completed “as soon as practicable.”

¹⁶ 47 C.F.R. § 17.4(g).

¹⁷ *NPRM*, 25 FCC Rcd at 3999 ¶ 41.

¹⁸ *Id.* at 4007 (App. A, Proposed Rule 17.4(j)).

appears that multiple signs must be installed whenever there is more than one path or roadway near the base station,¹⁹ whereas in proposed Section 17.4(j) it appears that multiple signage is only required when there are multiple points of ingress/egress to the site.²⁰

As a preliminary matter, CTIA believes that the FCC “got it right the first time” when it urged tower owners to use common sense in the placement of ASR signs and stated that the tower owner could opt to place multiple signs if the tower owner felt the unique circumstances of the particular site warranted it.²¹

If, however, the Commission opts to revise its rule regarding ASR signage, there is no need to require a site to have multiple signs installed. Due, in part, to the FCC requirement that tower owners restrict access to facilities for safety, towers are typically walled off, via fencing or other barriers. Access is often provided via a single locked gate. Thus, many sites have a single, primary entrance location. It would seem that the most logical location to place a sign containing ASR information would be at that primary vehicle access gate providing entry to the site. The FCC has previously stated that the goal of the signage program is “to aid in the ready identification of antenna structures....” CTIA respectfully submits that this goal would be most effectively

¹⁹ *Id.* at 3999 ¶ 41 (“We therefore propose to modify Section 17.4 to require that antenna structure owners display the ASR number so that it would be visible to a member of the general public who reaches the closest publicly accessible location near the base of the antenna structure. Where two or more separate locations of this nature exist for a single antenna structure, such as two roads from different directions to a mountaintop site, we would require posting the Antenna Structure Registration number at each such location.”) (citation omitted).

²⁰ *Id.* at 4007 (App. A, Proposed Rule 17.4(j)) (“If the base of the antenna structure has more than one point of ingress/egress, the Antenna Structure Registration Number must be posted at the publicly accessible area nearest each such point of ingress/egress.”).

²¹ See FCC Antenna Registration System, (ASR): About ASR: Posting Guidelines, *available at* http://wireless.fcc.gov/antenna/index.htm?job=about_posting (last visited July 20, 2010).

served by a rule that provides for signage at a single location, as opposed to a rule requiring the placement of multiple signs that, in the face of myriad factual permutations, creates substantial uncertainty as to the required number and location of the signs.²² Thus, CTIA recommends that the ASR Number be posted on the vehicle access gate if the antenna structure is surrounded by a fence, or at the base of the structure if it is not within a fenced area or located on a building.²³ Further, if a sign posted at the base of the structure is visible from the site's primary vehicle access gate, duplicative signage should not be required.²⁴

While CTIA supports revising the rule to make clear the posting requirements, it opposes the proposed revisions to Section 17.4(j) and the ambiguities that arise from the use of certain undefined terms. For example, the rule appears to use the terms “ingress/egress” and “roadway/path” interchangeably, but it is unclear whether these words have the same meaning. Is a “roadway/path” the only type of “ingress/egress” under the rule? The proposed rule also does not define the term “publicly accessible area.” Would the delineating point between publicly available and non-publicly available areas be a gate? Instead, the Commission should endeavor to more carefully define the terms contained in proposed Section 17.4(j) before it is adopted as suggested above, rather than defining the scope of the rule on an *ad hoc* basis in the context of disputes and enforcement proceedings.

²² An additional signage requirement would multiply the number of signs at a site and thereby make compliance with the signage requirement more difficult. Currently, signs located at primary entrances are subject to vandalism and it is likely that such vandalism would only increase if additional signs were added to less-traveled areas surrounding the site.

²³ Only where there are multiple antenna structures within a single fenced area should the ASR number be posted on both the gate and at the base of each structure.

²⁴ In addition, CTIA believes that Section 17.4 should be revised to clarify that ASR signage is only required for towers requiring ASRs pursuant to Part 17.

CONCLUSION

WHEREFORE, for the foregoing reasons, the Commission should adopt the proposals set forth herein regarding revision of Part 17 of its Rules regarding the construction, marking and lighting of antenna structures.

Respectfully submitted,

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